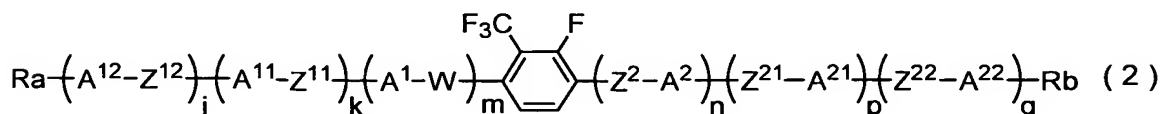
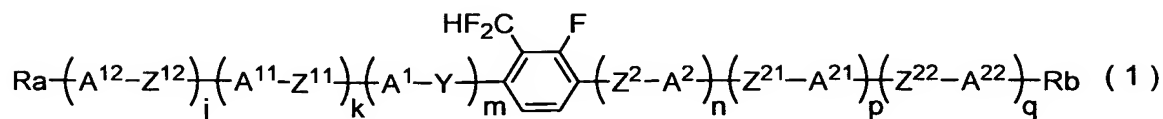


# CLAIMS

1. A compound represented by Formula (1) or Formula (2):



in which Ra and Rb each independently is hydrogen or alkyl of 1 to 20 carbon atoms; in the alkyl, arbitrary -CH<sub>2</sub>- may be replaced by -O-, -S-, -CO- or -SiH<sub>2</sub>-, arbitrary -(CH<sub>2</sub>)<sub>2</sub>- may be replaced by -CH=CH-, and arbitrary hydrogen may be replaced by halogen;

A<sup>1</sup>, A<sup>11</sup>, A<sup>12</sup>, A<sup>2</sup>, A<sup>21</sup> and A<sup>22</sup> each independently is 1,4-cyclohexylene, 1,4-phenylene, decahydronaphthalene-2,6-diyl, 1,2,3,4-tetrahydronaphthalene-2,6-diyl, or naphthalene-2,6-diyl; in the rings, one or not-adjacent two -CH<sub>2</sub>- may be replaced by -O-, -S-, -CO-, or -SiH<sub>2</sub>-, and arbitrary hydrogen may be replaced by halogen;

Y is a single bond, -(CH<sub>2</sub>)<sub>2</sub>-, -CH=CH-, -CF=CF-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CH<sub>2</sub>CO-, -COCH<sub>2</sub>-, -CH<sub>2</sub>SiH<sub>2</sub>-, -SiH<sub>2</sub>CH<sub>2</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -CH=CH-(CH<sub>2</sub>)<sub>2</sub>-, -(CH<sub>2</sub>)<sub>2</sub>-CH=CH-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-;

W is -(CH<sub>2</sub>)<sub>2</sub>-, -CH=CH-, -CF=CF-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CH<sub>2</sub>CO-, -COCH<sub>2</sub>-, -CH<sub>2</sub>SiH<sub>2</sub>-, -SiH<sub>2</sub>CH<sub>2</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>3</sub>-O-, -O-(CH<sub>2</sub>)<sub>3</sub>-, -CH=CH-(CH<sub>2</sub>)<sub>2</sub>-, -(CH<sub>2</sub>)<sub>2</sub>-CH=CH-, -(CH<sub>2</sub>)CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-;

Z<sup>11</sup>, Z<sup>12</sup>, Z<sup>2</sup>, Z<sup>21</sup> and Z<sup>22</sup> each independently is a single bond, -(CH<sub>2</sub>)<sub>2</sub>-, -COO-, -OCO-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CH=CH-, -CF=CF-, -CH<sub>2</sub>CO-, -COCH<sub>2</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>3</sub>-O-, -O-

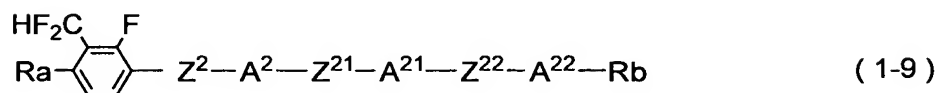
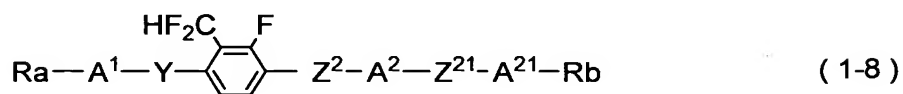
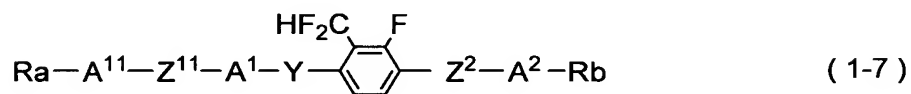
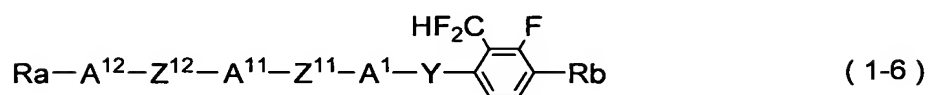
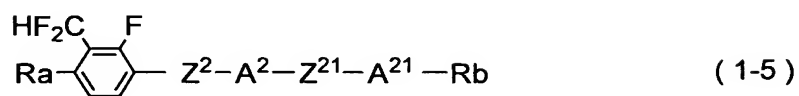
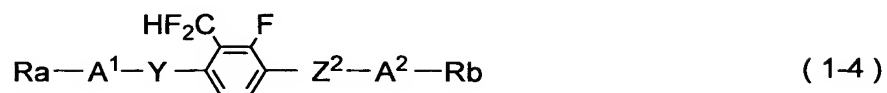
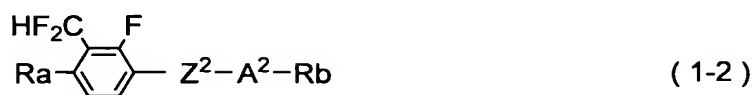
$(\text{CH}_2)_3-$ ,  $-\text{CH}=\text{CH}-(\text{CH}_2)_2-$ ,  $-(\text{CH}_2)_2-\text{CH}=\text{CH}-$ ,  $-(\text{CH}_2)_2\text{CF}_2\text{O}-$ , or  $-\text{OCF}_2(\text{CH}_2)_2-$ ;

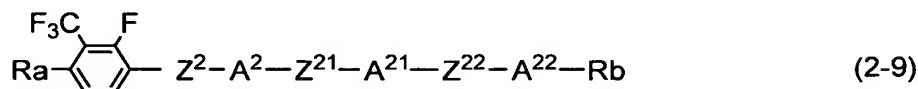
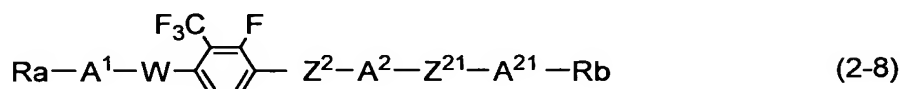
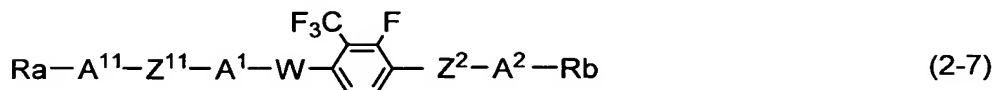
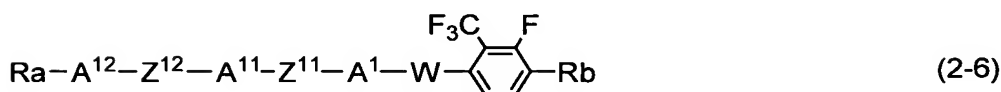
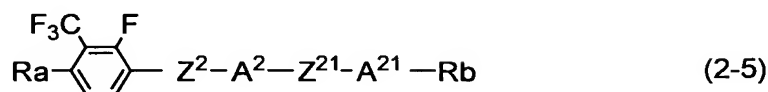
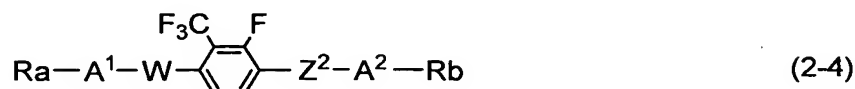
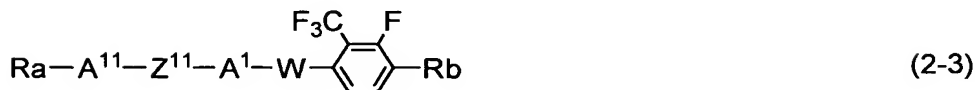
j, k, m, n, p and q each independently is 0 or 1, and the sum of them is 1, 2 or 3;

5        when m is 0, each of j and k is 0, Ra in Formula (1) is none of hydrogen, alkoxy, or alkoxymethyl, and Ra in Formula (2) is 1-alkenyl.

2. The compound according to claim 1, wherein the sum of j, k and m, and the sum of n, p and q each independently is 1  
10 or 2.

3. The compound according to claim 1, which is represented by any one of Formula (1-1) to Formula (1-9) and Formula (2-1) to Formula (2-9).





in which Ra and Rb each independently is hydrogen or alkyl of 1 to 20 carbon atoms; in the alkyl, arbitrary -CH<sub>2</sub>- not situated on the terminal may be replaced by -O-, -S-, or -CO-, arbitrary -(CH<sub>2</sub>)<sub>2</sub>- may be replaced by -CH=CH-, and arbitrary hydrogen may be replaced by halogen;

A<sup>1</sup>, A<sup>11</sup>, A<sup>12</sup>, A<sup>2</sup>, A<sup>21</sup> and A<sup>22</sup> each independently is 1,4-cyclohexylene, 1,4-phenylene, decahydronaphthalene-2,6-diyl, 1,2,3,4-tetrahydronaphthalene-2,6-diyl, or naphthalene-2,6-

diyl; and in the rings, one or not-adjacent two -CH<sub>2</sub>- may be replaced by -O-, -S- or -CO-, and arbitrary hydrogen may be replaced by halogen;

Y is a single bond, -(CH<sub>2</sub>)<sub>2</sub>-, -CH=CH-, -CF=CF-, -CF<sub>2</sub>O-,  
5 -OCF<sub>2</sub>-, -CH<sub>2</sub>CO-, -COCH<sub>2</sub>-, -CH<sub>2</sub>SiH<sub>2</sub>-, -SiH<sub>2</sub>CH<sub>2</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -  
CH=CH-(CH<sub>2</sub>)<sub>2</sub>-, -(CH<sub>2</sub>)<sub>2</sub>-CH=CH-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-;

W is -(CH<sub>2</sub>)<sub>2</sub>-, -CH=CH-, -CF=CF-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-,  
-OCF<sub>2</sub>-, -CH<sub>2</sub>CO-, -COCH<sub>2</sub>-, -CH<sub>2</sub>SiH<sub>2</sub>-, -SiH<sub>2</sub>CH<sub>2</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -  
(CH<sub>2</sub>)<sub>3</sub>-O-, -O-(CH<sub>2</sub>)<sub>3</sub>-, -CH=CH-(CH<sub>2</sub>)<sub>2</sub>-, -(CH<sub>2</sub>)<sub>2</sub>-CH=CH-, -  
10 (CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-;

Z<sup>11</sup>, Z<sup>12</sup>, Z<sup>2</sup>, Z<sup>21</sup> and Z<sup>22</sup> each independently is a single  
bond, -(CH<sub>2</sub>)<sub>2</sub>-, -COO-, -OCO-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-,  
-CH=CH-, -CF=CF-, -CH<sub>2</sub>CO-, -COCH<sub>2</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>3</sub>-O-, -O-  
(CH<sub>2</sub>)<sub>3</sub>-, -CH=CH-(CH<sub>2</sub>)<sub>2</sub>-, -(CH<sub>2</sub>)<sub>2</sub>-CH=CH-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -  
15 OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-;

Ra is none of hydrogen, alkoxy and alkoxymethyl in  
Formula (1-2), Formula (1-5) and formula (1-9); and Ra is  
1-alkenyl in Formula (2-2), Formula (2-5) and Formula (2-9).

4. The compound according to claim 3, wherein Ra and Rb  
20 each independently is alkyl of 1 to 10 carbon atoms, alkoxy  
of 1 to 10 carbon atoms, alkoxyalkyl of 2 to 10 carbon  
atoms, alkenyl of 2 to 10 carbon atoms, alkenyloxy of 3 to  
10 carbon atoms, perfluoroalkyl of 1 to 10 carbon atoms, or  
perfluoroalkoxy of 1 to 10 carbon atoms;

25 A<sup>1</sup>, A<sup>11</sup>, A<sup>12</sup>, A<sup>2</sup>, A<sup>21</sup> and A<sup>22</sup> each independently is 1,4-  
cyclohexylene, 1,3-dioxane-2,5-diyl, 4,6-dioxane-2,5-diyl,  
1,4-phenylene, 2-fluoro-1,4-phenylene, 3-fluoro-1,4-  
phenylene, 2,3-difluoro-1,4-phenylene,  
decahydronaphthalene-2,6-diyl, 1,2,3,4-  
30 tetrahydronaphthalene-2,6-diyl, or naphthalene-2,6-diyl;

$Z^{11}$  and  $Z^{12}$  each independently is a single bond, -  
(CH<sub>2</sub>)<sub>2</sub>-, -COO-, -OCO-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CH=CH-, -(CH<sub>2</sub>)<sub>4</sub>-, -  
CH=CH-(CH<sub>2</sub>)<sub>2</sub>-, -(CH<sub>2</sub>)<sub>2</sub>-CH=CH-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-;

$Z^2$ ,  $Z^{21}$  and  $Z^{22}$  each independently is a single bond, -  
5 (CH<sub>2</sub>)<sub>2</sub>-, -COO-, -OCO-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -  
CH=CH-, -CF=CF-, -(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>3</sub>-O-, -O-(CH<sub>2</sub>)<sub>3</sub>-, -CH=CH-  
(CH<sub>2</sub>)<sub>2</sub>-, -(CH<sub>2</sub>)<sub>2</sub>-CH=CH-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-;

Y is a single band, -(CH<sub>2</sub>)<sub>2</sub>-, -CH=CH-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -  
(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-; and

10 W is -(CH<sub>2</sub>)<sub>2</sub>-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CH=CH-,  
-(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>3</sub>-O-, -O-(CH<sub>2</sub>)<sub>3</sub>-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-.

5. The compound according to claim 3, wherein Ra and Rb  
each independently is alkyl of 1 to 10 carbon atoms, alkoxy  
of 1 to 10 carbon atoms, alkoxyalkyl of 2 to 10 carbon  
15 atoms, or alkenyl of 2 to 10 carbon atoms;

$A^1$ ,  $A^{11}$ ,  $A^{12}$ ,  $A^2$ ,  $A^{21}$  and  $A^{22}$  each independently is 1,4-  
cyclohexylene, 1,4-phenylene, 2-fluoro-1,4-phenylene, 3-  
fluoro-1,4-phenylene, or 2,3-difluoro-1,4-phenylene;

$Z^{11}$  and  $Z^{12}$  each independently is a single bond, -  
20 (CH<sub>2</sub>)<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CH=CH-, -(CH<sub>2</sub>)<sub>4</sub>-, CH=CH-(CH<sub>2</sub>)<sub>2</sub>-, -  
(CH<sub>2</sub>)<sub>2</sub>-CH=CH-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-;

$Z^2$ ,  $Z^{21}$  and  $Z^{22}$  each independently is a single bond, -  
(CH<sub>2</sub>)<sub>2</sub>-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CH=CH-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-,  
or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-;

25 Y is a single band, -(CH<sub>2</sub>)<sub>2</sub>-, -CH=CH-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -  
(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-; and

W is -(CH<sub>2</sub>)<sub>2</sub>-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CH=CH-,  
-(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>3</sub>-O-, -O-(CH<sub>2</sub>)<sub>3</sub>-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-.

6. The compound according to claim 3, wherein Ra is alkyl  
30 of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms,

and Rb is alkoxy of 1 to 10 carbon atoms;

A<sup>1</sup>, A<sup>11</sup>, A<sup>12</sup>, A<sup>2</sup>, A<sup>21</sup> and A<sup>22</sup> each independently is 1,4-cyclohexylene, 1,4-phenylene, 2-fluoro-1,4-phenylene, or 3-fluoro-1,4-phenylene;

5        Z<sup>11</sup> and Z<sup>12</sup> each independently is a single bond, or -CH=CH-;

Z<sup>2</sup>, Z<sup>21</sup> and Z<sup>22</sup> each independently is a single bond, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -or OCF<sub>2</sub>-;

10        Y is a single bond, -(CH<sub>2</sub>)<sub>2</sub>-, -CH=CH-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-; and

W is -(CH<sub>2</sub>)<sub>2</sub>-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CH=CH-, -(CH<sub>2</sub>)<sub>4</sub>-, -(CH<sub>2</sub>)<sub>3</sub>-O-, -O-(CH<sub>2</sub>)<sub>3</sub>-, -(CH<sub>2</sub>)<sub>2</sub>CF<sub>2</sub>O-, or -OCF<sub>2</sub>(CH<sub>2</sub>)<sub>2</sub>-.

7. The compound according to any one of claims 3 to 6, wherein A<sup>1</sup> or A<sup>2</sup> is 1,4-cyclohexylene.

15    8. The compound according to any one of claims 3 to 6, wherein A<sup>1</sup> or A<sup>2</sup> is 1,4-phenylene.

9. The compound according to any one of claims 3 to 6, wherein Y or Z<sup>2</sup> is a single bond in Formula (1-1) to Formula (1-9), and Z<sup>2</sup> is a single bond in Formula (2-1) to Formula  
20    (2-9).

10. The compound according to any one of claims 3 to 6, wherein A<sup>1</sup> or A<sup>2</sup> is 1,4-cyclohexylene, Y or Z<sup>2</sup> is a single bond in Formula (1-1) to Formula (1-9), and Z<sup>2</sup> is a single bond in Formula (2-1) to Formula (2-9).

25    11. The compound according to any one of claims 3 to 6, wherein A<sup>1</sup> or A<sup>2</sup> is 1,4-cyclohexylene, Y or Z<sup>2</sup> is a single bond in Formula (1-1) to Formula (1-9), and Z<sup>2</sup> is a single bond in Formula (2-1) to Formula (2-9).

12. The compound according to any one of claims 3 to 6,  
30    which is represented by any one of Formula (2-1), Formula

(2-3), Formula (2-4), Formula (2,6), Formula (2-7) and Formula (2-8); in which A<sup>1</sup> is 1,4-cyclohexylene.

13. The compound according to any one of claims 3 to 6, which is represented by Formula (2-1); in which A<sup>1</sup> is 1,4-cyclohexylene, and W is -(CH<sub>2</sub>)<sub>2</sub>-, -CH<sub>2</sub>O-, or -CF<sub>2</sub>O-.

14. The compound according to any one of claims 3 to 6, which is represented by Formula (2-3); in which any of A<sup>1</sup> and A<sup>11</sup> is 1,4-cyclohexylene, Z<sup>11</sup> is a single bond, and W is -(CH<sub>2</sub>)<sub>2</sub>-, -CH<sub>2</sub>O-, or -CF<sub>2</sub>O-.

15 15. The compound according to any one of claims 3 to 6, which is represented by Formula (2-6); in which any of A<sup>1</sup>, A<sup>11</sup> and A<sup>12</sup> is 1,4-cyclohexylene; any of Z<sup>11</sup> and Z<sup>12</sup> is a single bond; and W is -(CH<sub>2</sub>)<sub>2</sub>-, -CH<sub>2</sub>O- or -CF<sub>2</sub>O-.

16. The compound according to any one of claims 3 to 6, which is represented by any one of Formula (1-2), Formula (1-4), Formula (1-5), Formula (1-7), Formula (1-8), and Formula (1-9); in which Z<sup>2</sup> is -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CF<sub>2</sub>O- or -OCF<sub>2</sub>-.

17. The compound according to claim 3, which is represented by Formula (1-3); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1 to 10 carbon atoms, any of A<sup>1</sup> and A<sup>11</sup> is 1,4-cyclohexylene, and any of Y and Z<sup>11</sup> is a single bond.

18. The compound according to claim 3, which is represented by Formula (1-3); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1 to 10 carbon atoms, any of A<sup>1</sup> and A<sup>11</sup> is 1,4-cyclohexylene, Y is -CH<sub>2</sub>CH<sub>2</sub>-, and Z<sup>11</sup> is a single bond.

19. The compound according to claim 3, which is represented by Formula (1-3); in which Ra is alkyl of 1 to 10 carbon



atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1 to 10 carbon atoms, A<sup>1</sup> is 1,4-phenylene, A<sup>11</sup> is 1,4-cyclohexylene, and any of Y and Z<sup>11</sup> is a single bond. **20.**

The compound according to any one of claims 3 to 6, which  
5 is represented by Formula (1-3); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atom, Rb is alkoxy of 1 to 10 carbon atoms, any of A<sup>1</sup> and A<sup>11</sup> is 1,4-phenylene, and any of Y and Z<sup>11</sup> is a single bond.

**21.** The compound according to claim 3, which is represented  
10 by Formula (1-1); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1 to 10 carbon atoms, A<sup>1</sup> is 1,4-cyclohexylene, and Y is a single bond.

**22.** The compound according to claim 3, which is represented  
15 by Formula (1-1); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1 to 10 carbon atoms, A<sup>1</sup> is 1,4-cyclohexylene, and Y is -CH<sub>2</sub>CH<sub>2</sub>-.

**23.** The compound according to claim 3, which is represented  
20 by Formula (2-1); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1 to 10 carbon atoms, A<sup>1</sup> is 1,4-cyclohexylene, and W is - (CH<sub>2</sub>)<sub>2</sub>-.

**24.** The compound according to claim 3, which is represented  
25 by Formula (2-1); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1 to 10 carbon atoms, A<sup>1</sup> is 1,4-cyclohexylene, and W is -CH<sub>2</sub>O-.

**25.** The compound according to claim 3, which is represented  
30 by Formula (2-1); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1

to 10 carbon atoms,  $A^1$  is 1,4-phenylene, and W is  $-(CH_2)_2-$ .

26. The compound according to claim 3, which is represented by Formula (2-3); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1  
5 to 10 carbon atoms, any of  $A^1$  and  $A^{11}$  is 1,4-cyclohexylene,  $Z^{11}$  is a single bond, and W is  $-(CH_2)_2-$ .

27. The compound according to claim 3, which is represented by Formula (2-3); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1  
10 to 10 carbon atoms, any of  $A^1$  and  $A^{11}$  is 1,4-cyclohexylene,  $Z^{11}$  is a single bond, and W is  $-CH_2O-$ .

28. The compound according to claim 3, which is represented by Formula (2-3); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1  
15 to 10 carbon atoms,  $A^1$  is 1,4-phenylene,  $A^{11}$  is 1,4-cyclohexylene,  $Z^{11}$  is a single bond, and W is  $-(CH_2)_2-$ .

29. The compound according to claim 3, which is represented by Formula (2-3); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1  
20 to 10 carbon atoms, any of  $A^1$  and  $A^{11}$  is 1,4-phenylene,  $Z^{11}$  is a single bond, and W is  $-(CH_2)_2-$ .

30. The compound according to claim 3, which is represented by Formula (2,6); in which Ra is alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon atoms, Rb is alkoxy of 1  
25 to 10 carbon atoms, any of  $A^1$ ,  $A^{11}$  and  $A^{12}$  is 1,4-cyclohexylene; any of  $Z^{11}$  and  $Z^{12}$  is a single bond, and W is  $-(CH_2)_2-$  or  $-CH_2O-$ .

31. The compound according to claim 3, which is represented by Formula (1-2); in which Ra is alkyl of 1 to 10 carbon  
30 atoms, Rb is alkyl of 1 to 10 carbon atoms or alkenyl of 2

to 10 carbon atoms,  $A^2$  is 1,4-cyclohexylene, and  $Z^2$  is -  
OCH<sub>2</sub>-.

32. The compound according to claim 3, which is represented  
by Formula (1-5); in which Ra is alkyl of 1 to 10 carbon  
5 atoms, Rb is alkyl of 1 to 10 carbon atoms or alkenyl of 2  
to 10 carbon atoms, any of  $A^2$  and  $A^{21}$  is 1,4-cyclohexylene,  
 $Z^2$  is -OCH<sub>2</sub>-, and  $Z^{21}$  is a single bond.

33. The compound according to claim 3, which is represented  
by Formula (1-4); in which Ra and Rb each independently is  
10 alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon  
atoms, any of  $A^1$  and  $A^2$  is 1,4-phenylene, and any of Y and  
 $Z^2$  is a single bond.

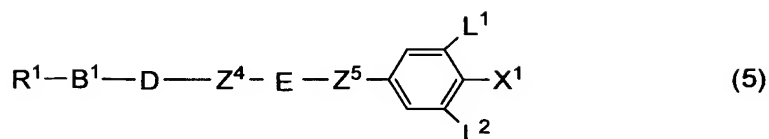
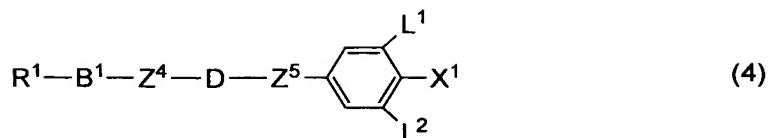
34. The compound according to claim 3, which is represented  
by Formula (1-4); in which Ra and Rb each independently is  
15 alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon  
atoms,  $A^1$  is 1,4-cyclohexylene,  $A^2$  is 1,4-phenylene, and any  
of Y and  $Z^2$  is a single bond.

35. The compound according to claim 3, which is represented  
by Formula (1-4); in which Ra and Rb each independently is  
20 alkyl of 1 to 10 carbon atoms or alkenyl of 2 to 10 carbon  
atoms,  $A^1$  is 1,4-phenylene,  $A^2$  is 1,4-cyclohexylene, and any  
of Y and  $Z^2$  is a single bond.

36. A liquid crystal composition which contains at least  
one of the compounds described in claim 1 and may contain  
25 at least one optically active compound.

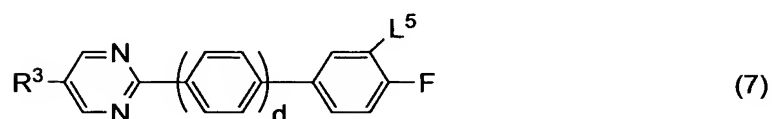
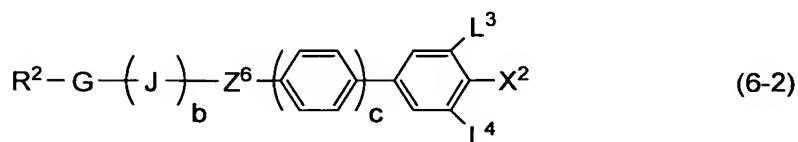
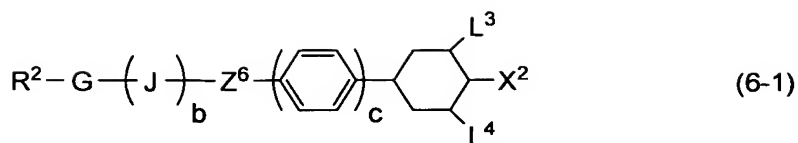
37. A liquid crystal composition which contains at least  
one of the compounds described in claim 1 and at least one  
compound selected from the group consisting of compounds  
represented by Formula (3), Formula (4), and Formula (5)  
30 respectively, and may contain at least one optically active

compound:



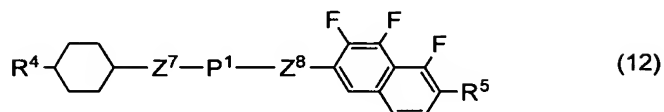
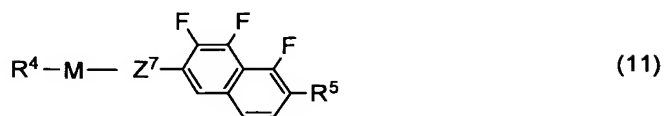
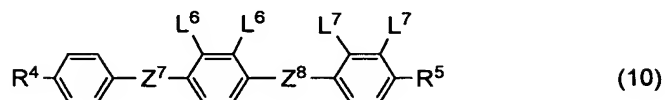
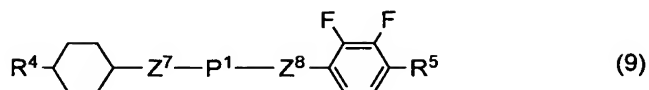
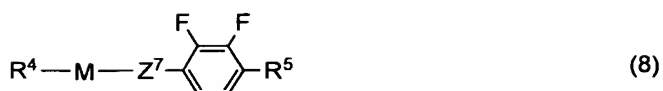
5 in which  $R^1$  is alkyl of 1 to 10 carbon atoms; in the alkyl, arbitrary  $-\text{CH}_2-$  may be replaced by  $-\text{O}-$ , arbitrary  $-(\text{CH}_2)_2-$  may be replaced by  $-\text{CH}=\text{CH}-$ , and arbitrary hydrogen may be replaced by fluorine;  $X^1$  is fluorine, chlorine,  $-\text{OCF}_3$ ,  $-\text{OCHF}_2$ ,  $-\text{CF}_3$ ,  $-\text{CHF}_2$ ,  $-\text{CH}_2\text{F}$ ,  $-\text{OCF}_2\text{CHF}_2$  or  $-\text{OCF}_2\text{CHFCF}_3$ ;  $B^1$  and D  
10 each independently is 1,4-cyclohexylene, 1,4-phenylene, 1,3-dioxane-2,5-diyl, or 1,4-phenylene in which at least one hydrogen is replaced by fluorine; E is 1,4-cyclohexylene, 1,4-phenylene, or 1,4-phenylene in which at least one hydrogen is replaced by fluorine;  $Z^4$  and  $Z^5$  each  
15 independently is  $-(\text{CH}_2)_2-$ ,  $-(\text{CH}_2)_4-$ ,  $-\text{COO}-$ ,  $-\text{CF}_2\text{O}-$ ,  $-\text{OCF}_2-$ ,  $-\text{CH}=\text{CH}-$ , or a single bond; and  $L^1$  and  $L^2$  each independently is hydrogen or fluorine.

**38.** A liquid crystal composition which contains at least one of the compounds described in claim 1 and at least one  
20 compound selected from the group consisting of compounds represented by Formula (6-1), Formula (6-2), and Formula (7) respectively, and may contain at least one optically active compound:



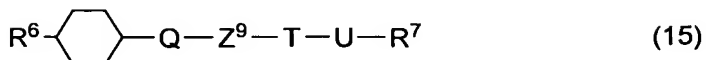
in which  $R^2$  and  $R^3$  each independently is alkyl of 1 to 10 carbon atoms; in the alkyl, arbitrary  $-\text{CH}_2-$  may be replaced by  $-\text{O}-$ , arbitrary  $-(\text{CH}_2)_2-$  may be replaced by  $-\text{CH}=\text{CH}-$ , and arbitrary hydrogen may be replaced by fluorine;  $X^2$  is  $-\text{CN}$  or  $-\text{C}\equiv\text{C}-\text{CN}$ ;  $G$  is 1,4-cyclohexylene, 1,4-phenylene, 1,3-dioxane-2,5-diyl, or pyrimidine-2,5-diyl;  $J$  is 1,4-cyclohexylene, 1,4-phenylene, pyrimidine-2,5-diyl or 1,4-phenylene in which at least one hydrogen is replaced by fluorine;  $Z^6$  is  $-(\text{CH}_2)_2-$ ,  $-\text{COO}-$ ,  $-\text{CF}_2\text{O}-$ ,  $\text{OCF}_2-$  or a single bond;  $L^3$ ,  $L^4$  and  $L^5$  each independently is hydrogen or fluorine; and  $b$ ,  $c$  and  $d$  each independently is 0 or 1.

**39.** A liquid crystal composition which contains at least one of the compounds described in claim 1 and at least one compound selected from the group consisting of compounds represented by Formula (8), Formula (9), Formula (10), Formula (11) and Formula (12) respectively, and may contain at least one optically active compound:



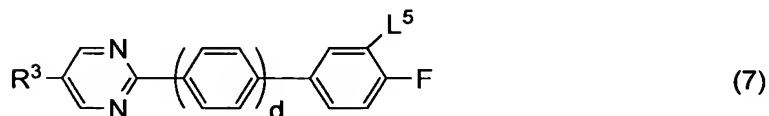
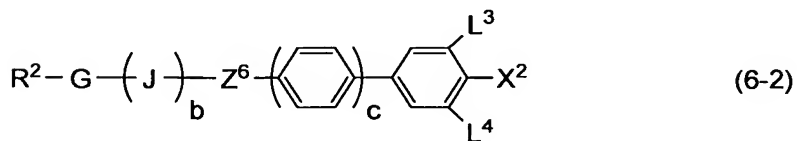
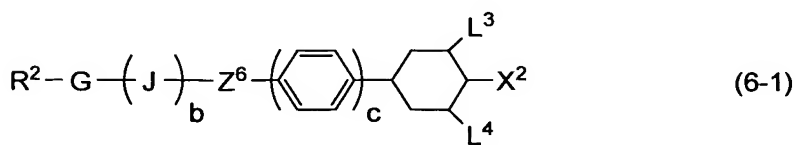
in which  $R^4$  is alkyl of 1 to 10 carbon atoms and  $R^5$  is  
 5 arbitrary  $-\text{CH}_2-$  may be replaced by  $-\text{O}$ , arbitrary  $-(\text{CH}_2)_2-$   
 may be replaced by  $-\text{CH}=\text{CH}-$  and arbitrary hydrogen may be  
 replaced by fluorine;  $M$  and  $P^1$  each independently is 1,4-  
 cyclohexylene, 1,4-phenylene, or decahydro-2,6-naphthylene;  
 10  $Z^7$  and  $Z^8$  each independently is  $-(\text{CH}_2)_2-$ ,  $-\text{COO}-$ , or a single  
 bond;  $L^6$  and  $L^7$  each independently is hydrogen or fluorine;  
 and at least one of  $L^6$  and  $L^7$  is fluorine.

**40.** A liquid crystal composition which contains at least  
 one of the compounds described in claim 1 and at least one  
 compound selected from the group consisting of compounds  
 15 represented by Formula (13), Formula (14) and Formula (15)  
 respectively, and may contain at least one optically active  
 compound:



in which  $R^6$  and  $R^7$  each independently is alkyl of 1 to 10 carbon atoms; in the alkyl, arbitrary  $-\text{CH}_2-$  may be replaced by  $-\text{O}-$ , arbitrary  $-(\text{CH}_2)_2-$  may be replaced by  $-\text{CH}=\text{CH}-$ , and arbitrary hydrogen may be replaced by fluorine; Q, T and U each independently is 1,4-cyclohexylene, 1,4-phenylene, pyrimidine-2,5-diyl, or 1,4-phenylene in which at least one hydrogen is replaced by fluorine; and  $Z^9$  and  $Z^{10}$  each independently is  $-\text{C}\equiv\text{C}-$ ,  $-\text{COO}-$ ,  $-(\text{CH}_2)_2-$ ,  $-\text{CH}=\text{CH}-$ ,  $-\text{CH}_2\text{O}-$ , or a single bond.

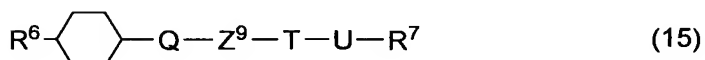
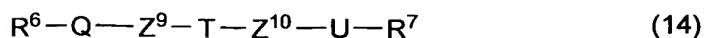
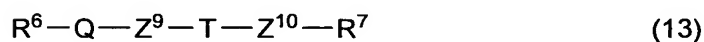
**41.** The liquid crystal composition according to claim 37, which further contains at least one compound selected from the group consisting of compounds represented by Formula (6-1), Formula (6-2) and Formula (7), respectively:



in which  $R^2$  and  $R^3$  each independently is alkyl of 1 to 10

carbon atoms; in the alkyl, arbitrary  $-\text{CH}_2-$  may be replaced by  $-\text{O}-$ , arbitrary  $-(\text{CH}_2)_2-$  may be replaced by  $-\text{CH}=\text{CH}-$ , and arbitrary hydrogen may be replaced by fluorine;  $\text{X}^2$  is  $-\text{CN}$  or  $-\text{C}\equiv\text{C}-\text{CN}$ ; G is 1,4-cyclohexylene, 1,4-phenylene, 1,3-dioxane-2,5-diyl, or pyrimidine-2,5-diyl; J is 1,4-cyclohexylene, 1,4-phenylene, pyrimidine-2,5-diyl, or 1,4-phenylene in which at least one hydrogen is replaced by fluorine;  $\text{Z}^6$  is  $-(\text{CH}_2)_2-$ ,  $-\text{COO}-$ ,  $-\text{CF}_2\text{O}$ ,  $-\text{OCF}_2-$  or a single bond;  $\text{L}^3$ ,  $\text{L}^4$  and  $\text{L}^5$  each independently is hydrogen or fluorine; and b, c, and d each independently is 0 or 1.

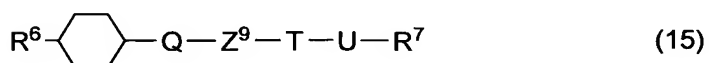
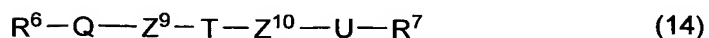
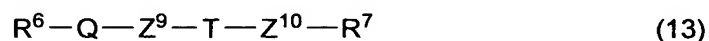
**42.** The liquid crystal composition according to claim 37, which further contains at least one compound selected from the group consisting of compounds represented by Formula (13), Formula (14) and Formula (15), respectively:



in which  $\text{R}^6$  and  $\text{R}^7$  each independently is alkyl of 1 to 10 carbon atoms; in the alkyl, arbitrary  $-\text{CH}_2-$  may be replaced by  $-\text{O}-$ , arbitrary  $-(\text{CH}_2)_2-$  may be replaced by  $-\text{CH}=\text{CH}-$ , and arbitrary hydrogen may be replaced by fluorine; Q, T and U each independently is 1,4-cyclohexylene, 1,4-phenylene, pyrimidine-2,5-diyl, or 1,4-phenylene in which at least one hydrogen is replaced by fluorine; and  $\text{Z}^9$  and  $\text{Z}^{10}$  each independently is  $-\text{C}\equiv\text{C}-$ ,  $-\text{COO}-$ ,  $-(\text{CH}_2)_2-$ ,  $-\text{CH}=\text{CH}-$ ,  $-\text{CH}_2\text{O}-$ , or a single bond.

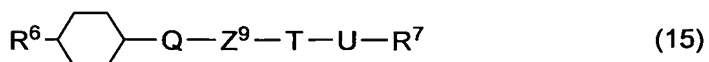
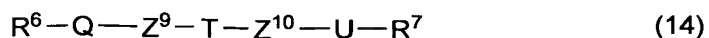
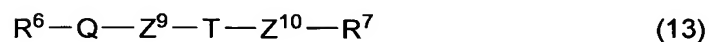


**43.** The liquid crystal composition according to claim 38, which further contains at least one compound selected from the group consisting of compounds represented by Formula (13), Formula (14) and Formula (15), respectively:



in which  $R^6$  and  $R^7$  each independently is alkyl of 1 to 10 carbon atoms; in the alkyl, arbitrary  $-\text{CH}_2-$  may be replaced by  $-\text{O}-$ , arbitrary  $-(\text{CH}_2)_2-$  may be replaced by  $-\text{CH}=\text{CH}-$ , and arbitrary hydrogen may be replaced by fluorine; Q, T and U each independently is 1,4-cyclohexylene, 1,4-phenylene, pyrimidine-2,5-diyl, or 1,4-phenylene in which at least one hydrogen is replaced by fluorine; and  $Z^9$  and  $Z^{10}$  each independently is  $-\text{C}\equiv\text{C}-$ ,  $-\text{COO}-$ ,  $-(\text{CH}_2)_2-$ ,  $-\text{CH}=\text{CH}-$ ,  $-\text{CH}_2\text{O}-$ , or a single bond.

**44.** The liquid crystal composition according to claim 39, which further contains at least one compound selected from the group consisting of compounds represented by Formula (13), Formula (14) and Formula (15), respectively:



in which R<sup>6</sup> and R<sup>7</sup> each independently is alkyl of 1 to 10 carbon atoms; in the alkyl, arbitrary -CH<sub>2</sub>- may be replaced by -O-, arbitrary -(CH<sub>2</sub>)<sub>2</sub>- may be replaced by -CH=CH-, and  
5 arbitrary hydrogen may be replaced by fluorine; Q, T and U each independently is 1,4-cyclohexylene, 1,4-phenylene, pyrimidine-2,5-diyl, or 1,4-phenylene in which at least one hydrogen is replaced by fluorine; and Z<sup>9</sup> and Z<sup>10</sup> each  
10 independently is -C≡C-, -COO-, -(CH<sub>2</sub>)<sub>2</sub>-, -CH=CH-, -CH<sub>2</sub>O-, or a single bond.

**45.** Use of the liquid crystal composition described in any one of claims 36 to 44 for producing a liquid crystal display device.

**46.** A liquid crystal display device containing the liquid  
15 crystal composition described in any one of claims 36 to 44.